

PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Borran, *et al.* Docket No.: 088245-0108  
Serial No.: 10/671,346 Group Art Unit: 2611  
Filed: October 24, 2003 Examiner: Kevin Michael Burd  
For: **PARTIALLY COHERENT CONSTELLATIONS FOR MULTIPLE-  
ANTENNA SYSTEMS**

**DECLARATION OF PRABODH VARSHNEY UNDER 37 C.F.R. § 1.132**

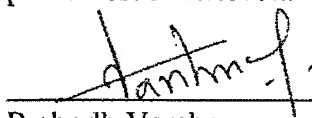
1. The below-named declarant, Prabodh Varshney (hereinafter "I"), is not a named author of the paper, Borran, *et al.*, On Design Criteria and Construction of Noncoherent Space-time Constellations, IEEE Transactions on Information Theory, pp. 2332–2351, 49(10), October 2003 (hereinafter "Borran 1 *et al.*"). Borran 1 *et al.* is co-authored by M. J. Borran, A. Sabharwal, B. Aazhang, and D.H. Johnson.

2. I am also not a named author of the paper, Borran, *et al.*, Constellations for Imperfect Channel State Information at the Receiver, 40<sup>th</sup> Annual Allerton Conference on Communication, Control, and Computing, October 2002 (hereinafter "Borran 2 *et al.*"). Borran 2 *et al.* is co-authored by M. J. Borran, A. Sabharwal, and B. Aazhang.

3. I am a named inventor, along with Mohammad Jaber Borran, Ashutosh Sabharwal, Behnaam Aazhang, and Prabodh Varshney, of the above-referenced patent application.

4. Based on information and belief, I hereby declare that the material presented in Borran 1 *et al.* and Borran 2 *et al.* and claimed in the above-referenced patent application was derived from subject matter which was invented by myself jointly with Mohammad Jaber Borran, Ashutosh Sabharwal, and Behnaam Aazhang, and that we are the sole inventors of said subject matter.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
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Prabodh Varshney

May 02, 2008  
Date